

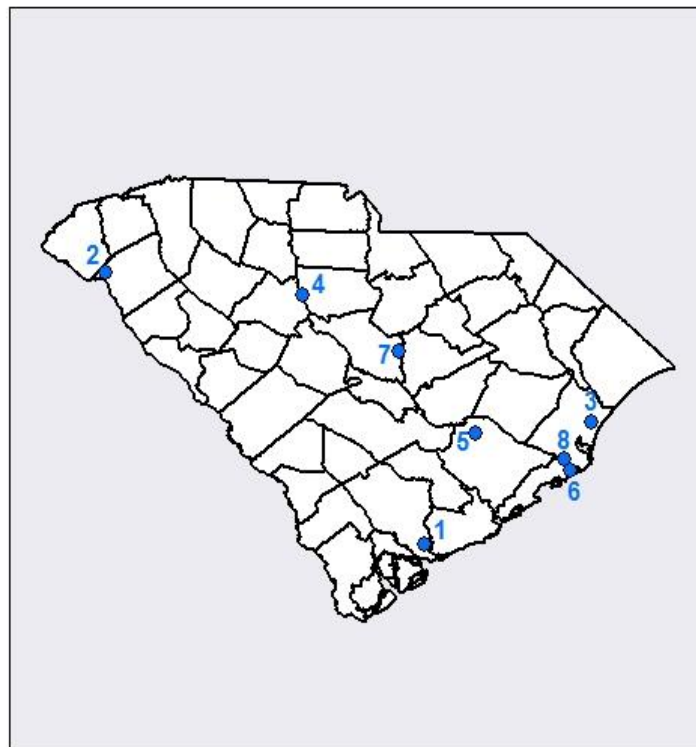
2019-2020 Category 1 Waterfowl Hunter Survey Report
South Carolina Department of Natural Resources



Introduction

The South Carolina Department of Natural Resources' (SCDNR) Public Lottery Hunts program provides quality hunting opportunities to the general public on public lands that are intensively managed for wildlife. Since the inception of this program, it has experienced significant growth in participation as additional hunt sites, dates, and species have been added. The program now receives more than 10,000 applicants annually and this year provided opportunities for more than 4000 hunters across ten different lottery hunts.

During the 2019-2020 waterfowl season, SCDNR managed 13 sites as Category 1 Waterfowl Areas. Our Category 1 Waterfowl areas are available to hunters only by special permit obtained through an annual drawing. These areas are managed to attract and hold ducks for the duration of the waterfowl season and disturbance is managed by limiting hunting days. The Category 1 Waterfowl Lottery provides participants a quality hunting experience at intensively managed waterfowl areas with a limited number of other hunters. Public hunts on SCDNR Waterfowl Areas began at Bear Island in the 1958-1959 season, and the 1960-1961 Legislative Report provides the first documentation of a public draw for waterfowl hunting opportunities, again at Bear Island, where they report an average of 2.1 ducks per man. Participation in the Public Waterfowl Lottery has grown over the years as have the available hunting opportunities. For the 2019-2020 waterfowl season, hunts were offered at 13 sites across the state, 4,988 hunters applied for the lottery, and 1,073 hunters were selected to fill the available slots.



Category 1 Waterfowl Areas: 1.Bear Island (East, West, Springfield/The Cut), 2.Beaverdam, 3.Samworth, 4.Broad River, 5.Sandy Beach, 6.Santee Coastal Reserve (Cedar Island, Murphy Island The Cape), 7.Wateree, 8.Santee Delta (East and West)

While feedback from hunt participants is generally positive, no recent formal information on hunter satisfaction for these hunts exists. It is believed that hunters whose experiences are far above or below their expectations are the only ones who contact SCDNR to make their opinions known and may not represent the actual satisfaction of all participants. Additionally, little is known about why an individual chooses to participate in a Waterfowl Lottery Hunt or what aspects they consider to be the most important to their hunt satisfaction. In order to better understand the satisfaction and motivations of Category 1 Waterfowl Lottery Hunt participants, SCDNR initiated a survey of successful applicants at the conclusion of the 2019-2020 waterfowl season. This survey targeted hunters that had applied and were selected for Category 1 waterfowl hunts through the annual Waterfowl Lottery and was sent by email to hunt participants. The email-based survey was selected due to the minimal cost associated with conducting the surveys as well as ease of access and completion by participants. Additionally, the online survey tool allowed SCDNR to send email reminders to participants that had not yet responded.

It is our hope that this survey provided participants an opportunity to express their level of satisfaction with their hunt, and to provide valuable feedback to the Department. Results of the survey will help drive the management of both the lottery hunt process and the lottery hunting experience.

Methods

The 2019-2020 Category 1 Waterfowl Lottery received applications from 2,051 hunt parties comprised of, 4,988 individual hunters. Applicants were able to select a hunt party size between 1 and 4 people, select from 13 hunt site locations and select individual available hunt dates for each site. If selected during the Waterfowl Lottery, parties were assigned to a specific hunt site and date. We decided to survey the selected 2019-2020 Waterfowl Lottery hunters to gauge their satisfaction with the experience.

On February 9, 2020, a short online survey was emailed to 904 people who had been selected to participate in the 2019-2020 Category 1 Waterfowl Hunt. This survey was sent after the completion of the waterfowl season and after all Waterfowl Lottery Hunts had occurred. Our objective was to capture the participants' opinions as soon as the season ended while their hunting experience was fresh.

SCDNR Information Technology staff were able to extract email information for members of selected parties (Lottery Winners) from the SCDNR database. Of the 1,073 hunters selected in the 2019-2020 Category 1 Waterfowl Lottery, 904 had email addresses associated with their Customer Identification Number in the SCDNR database. This is approximately 84% of all 2019-2020 participants. Email invitations to the survey were mailed on February 9, 2020 to these 904 individual email addresses.

The survey consisted of a series of questions developed by SCDNR staff and was delivered to participants using Survey Monkey, an online survey development tool. Participants selected from a set of responses that best represented their thoughts. In addition, hunters could provide a written response for some questions. We believe capturing both types of responses, choosing from representative answers and free comment, would allow us to better capture the thoughts and experiences of our hunters. Email reminders were sent to those that had not responded to the survey on February 16th and again on February 23rd as a final reminder. The survey closed on February 24th, 2020.

All questions posed to the participants are below and include the available responses.

Survey Questions

1. How many times did you waterfowl hunt in SC this season (including the lottery hunt)?

Answer selections available: 1, 2-4, 5-7, 8-10, more than 10.

2. Rate the ease of the waterfowl lottery application and site selection process?

Answer selections available: Very easy, Easy, Neither easy nor difficult, Difficult, Very difficult, Other (please specify). Respondent was provided space to type answer if other was selected.

3. Do you have any additional comments about the lottery hunt application process and or information provided by the notification portal?

Respondent was provided space to type answer.

4. Which WMA waterfowl lottery hunt site were you selected to hunt this season?

Answer selections available: Bear Island – East, Bear Island – Springfield/The Cut, Bear Island – West, Beaverdam, Broad River, Samworth, Sandy Beach, Santee Coastal – The Cape, Santee Coastal – Cedar Island, Santee Coastal – Murphy Island, Santee Delta – East, Santee Delta – West, Wateree, I did not attend the hunt I was selected for.

5. Upon arriving to the hunt site, the pre-hunt information briefing provided by the hunt site manager was:

Answer selections available: Very Poor, Poor, Fair, Good, Excellent.

6. What other information would you have liked to hear in the pre-hunt briefing?

Respondent was provided space to type answer.

7. Rate the professionalism and conduct of the DNR staff at your hunt.

Answer selections available: Very Poor, Poor, Fair, Good, Excellent.

8. How many ducks did you harvest on your lottery hunt?

Answer selections available: 0, 1, 2, 3, 4, 5, 6.

9. Please rate the importance you place on the following aspects of Category 1 Waterfowl lottery hunts:

Answer selections available for aspects below: Not Important, Somewhat Important, Important, Very Important, Most Important.

- a. Opportunity to kill a limit of ducks
- b. Being able to see a lot of ducks
- c. Having an opportunity to harvest a variety of species
- d. Hunting new places/see different areas or habitat
- e. Opportunity to kill a specific species of duck (i.e pintail, mottled duck)
- f. Spending time with family or friends

10. Overall, rate your satisfaction with your hunt?

Answer selections available: Very dissatisfied, Dissatisfied, Neither satisfied nor dissatisfied, Satisfied, Very satisfied

11. Would you apply for a WMA waterfowl lottery hunt again?

Answer selections available: Yes, No

12. Would you apply to return to the same WMA hunt site again?

Answer selections available: Yes, No.

13. Do you have any additional comments that you would like to provide?

Respondent was provided space to type answer.

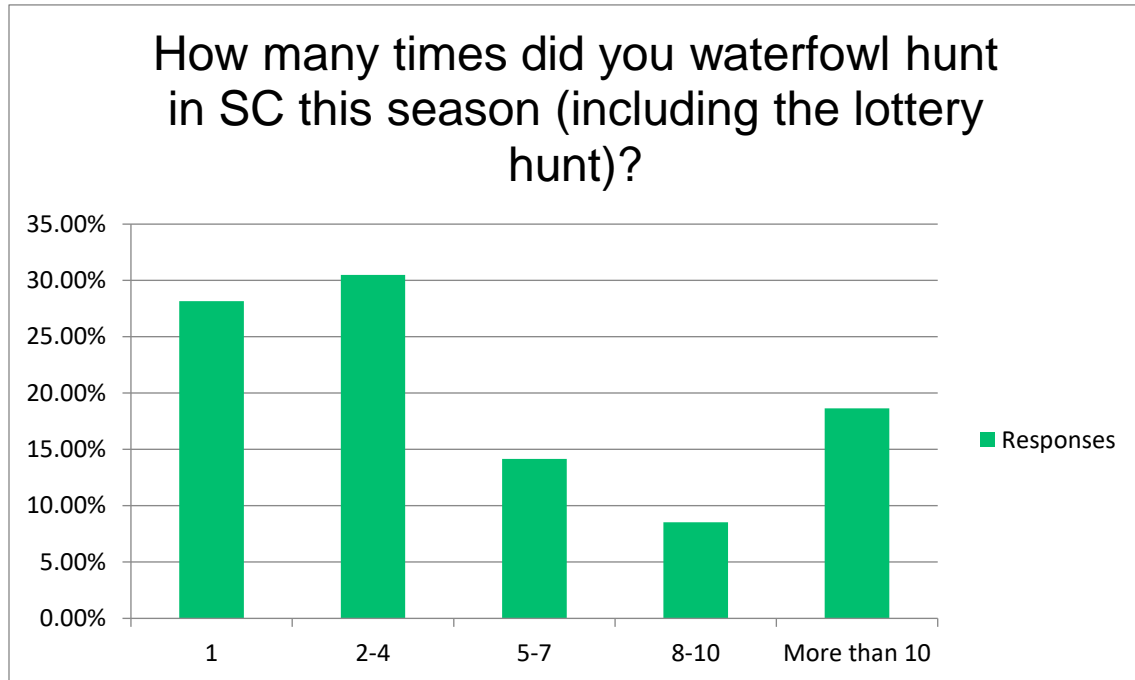
Results

The online survey was successfully emailed to 904 people and open to receive responses for 16 days between February 9 and February 24, 2020. A total of 521 unique responses were received from participants, a 57.66~~7~~% response rate from those surveyed and 48.5% of total participants in 2019-2020 Category 1 Waterfowl Lottery Hunts.

As survey participants were able to elect to skip any question, not every question was completed by all 521 responders as reflected in the data below. For questions in which participants were invited to provide a unique answer, we classified responses as positive, negative, neutral, or other. If no response was provided or the response provided was to verify they had no additional comment, ie: "no", "N/A", "nothing to add", "nothing more" etc..., these were not included in the results presented and were treated as a non-response.

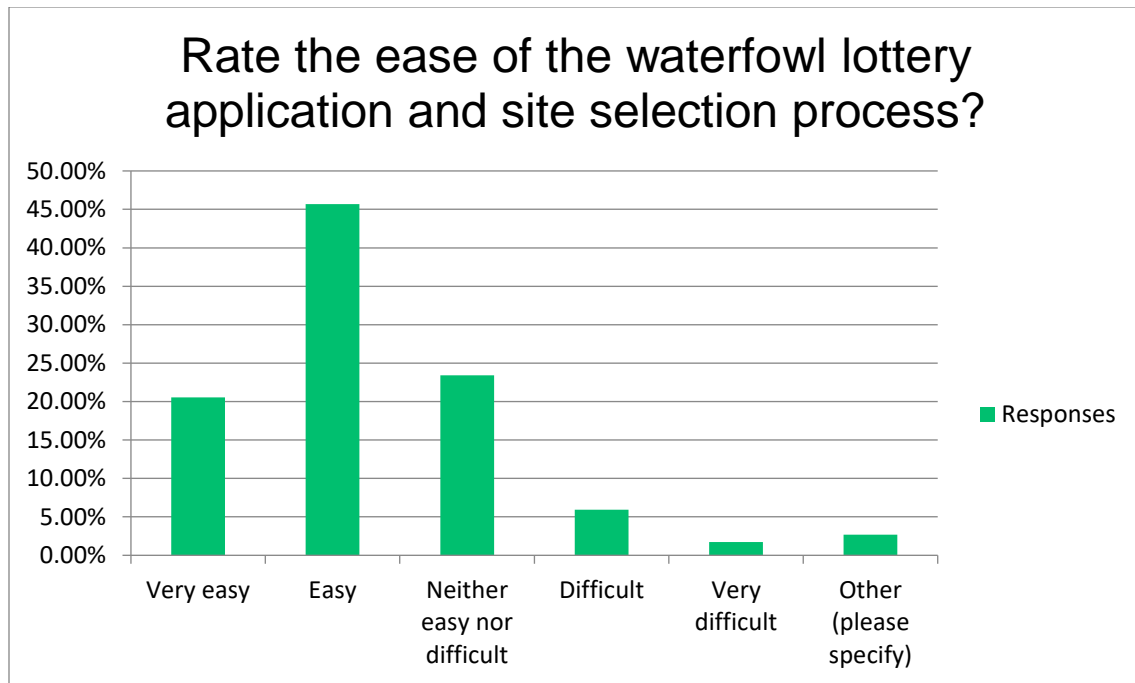
Both graphical and numerical data for the response to each question are provided below. The data for free answer questions were categorized and the summary is presented below. The raw response data provided by the respondents can be found at the end of this report and may provide insight into the range of answers that were provided to these questions.

Question 1



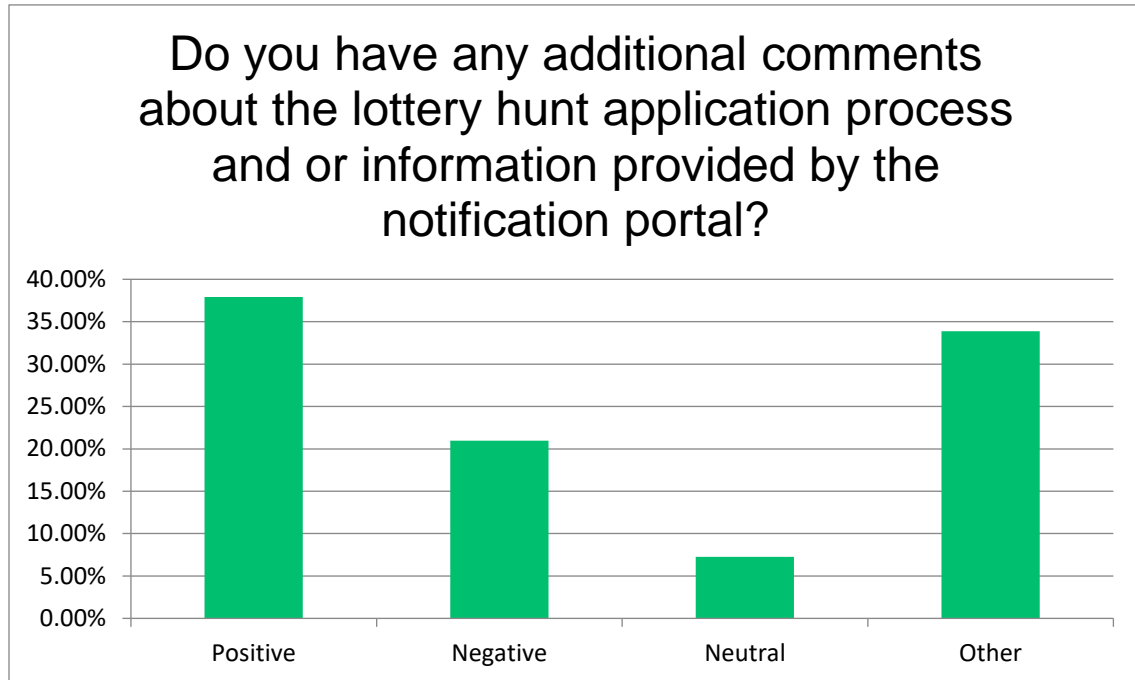
Answer Choices	Responses	
1	28.16%	145
2-4	30.49%	157
5-7	14.17%	73
8-10	8.54%	44
More than 10	18.64%	96
Answered		515
Skipped		6

Question 2



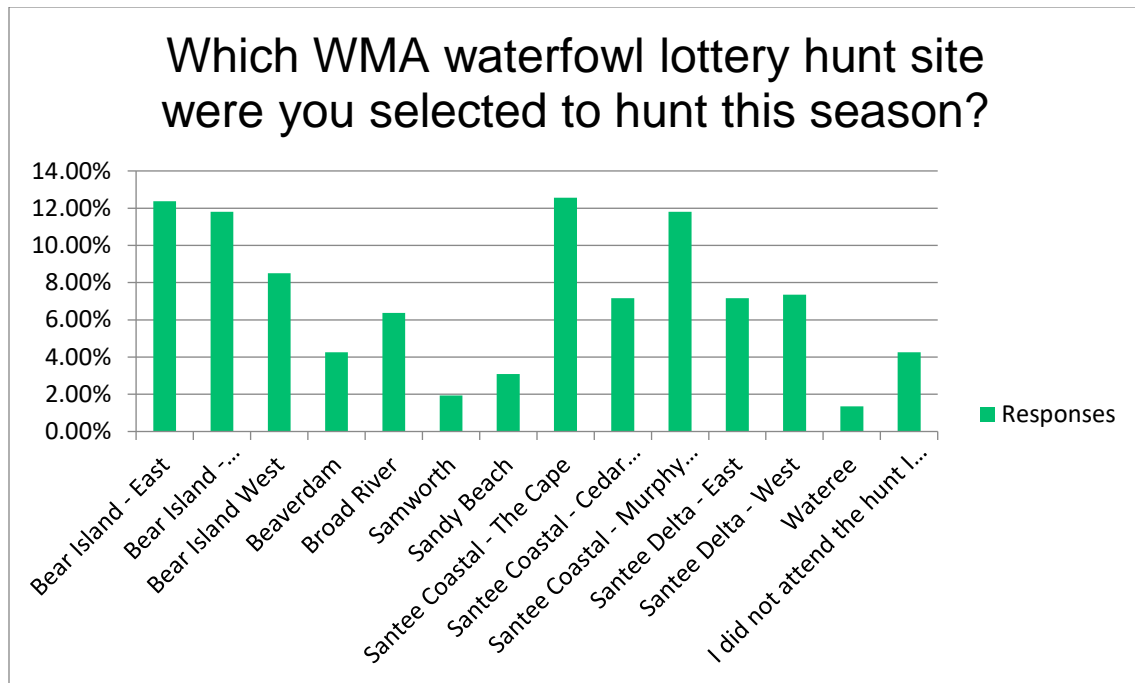
Answer Choices	Responses	
Very easy	20.54%	107
Easy	45.68%	238
Neither easy nor difficult	23.42%	122
Difficult	5.95%	31
Very difficult	1.73%	9
Other (please specify)	2.69%	14
Answered		521
Skipped		0

Question 3



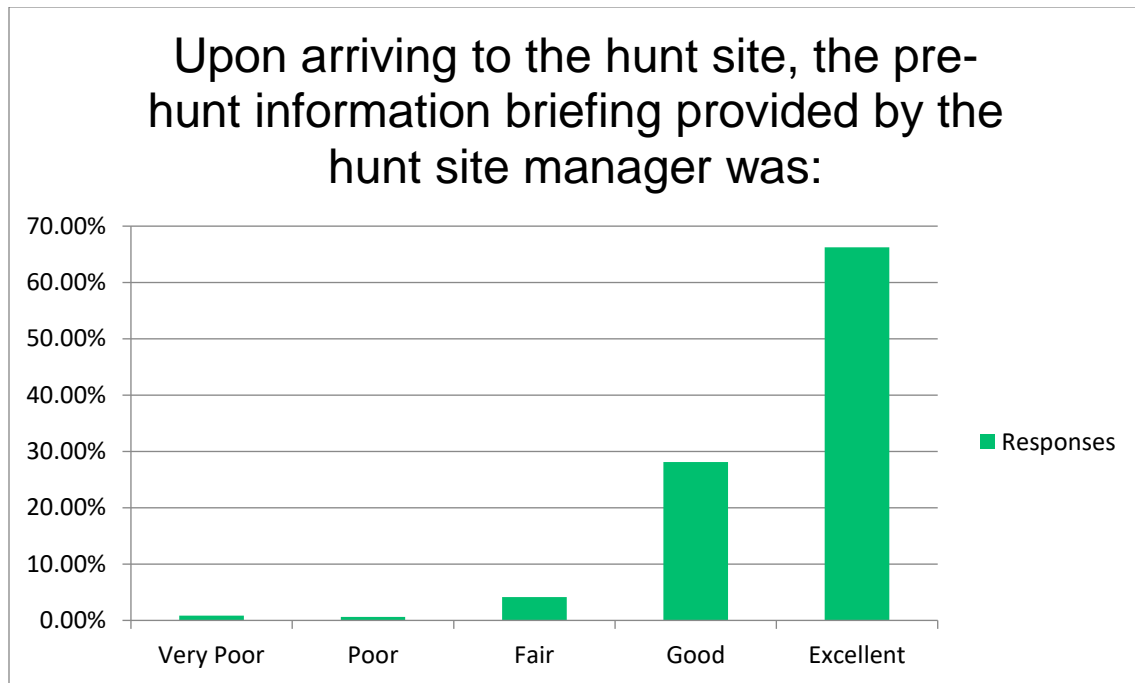
Answer Choices	Responses	
Positive	37.90%	47
Negative	20.97%	26
Neutral	7.26%	9
Other	33.87%	42
Answered		124

Question 4



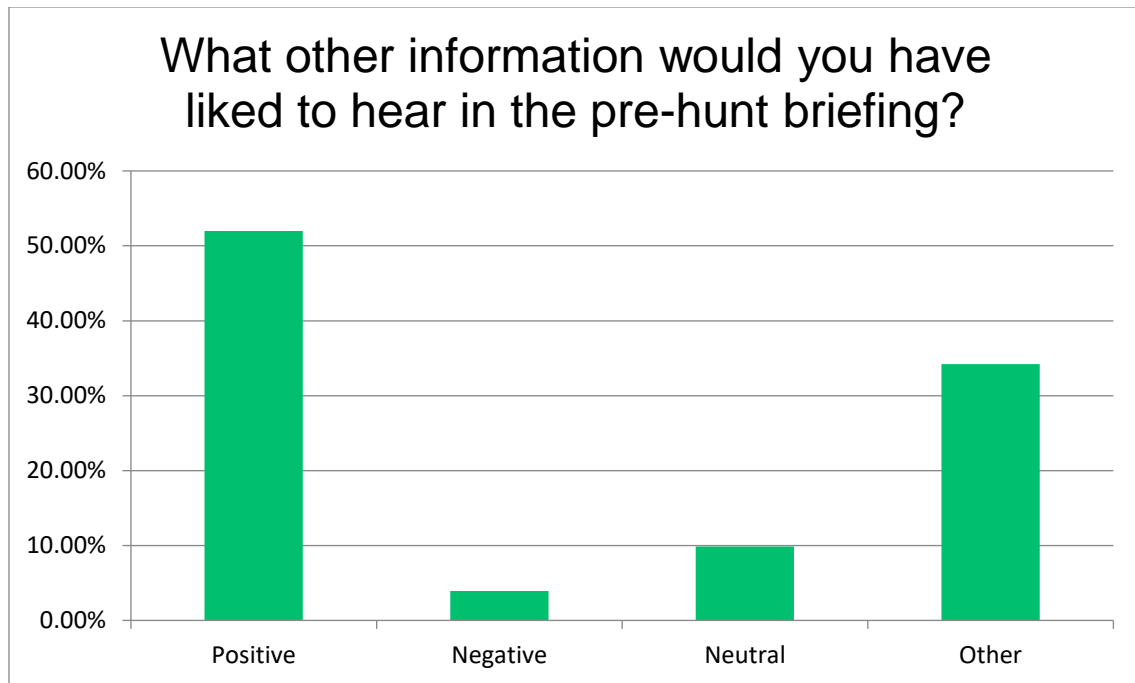
Answer Choices	Responses	
Bear Island - East	12.38%	64
Bear Island - Springfield/The Cut	11.80%	61
Bear Island West	8.51%	44
Beaverdam	4.26%	22
Broad River	6.38%	33
Samworth	1.93%	10
Sandy Beach	3.09%	16
Santee Coastal - The Cape	12.57%	65
Santee Coastal - Cedar Island	7.16%	37
Santee Coastal - Murphy Island	11.80%	61
Santee Delta - East	7.16%	37
Santee Delta - West	7.35%	38
Wateree	1.35%	7
I did not attend the hunt I was selected for	4.26%	22
Answered		517
Skipped		4

Question 5



Answer Choices	Responses	
Very Poor	0.83%	4
Poor	0.63%	3
Fair	4.17%	20
Good	28.13%	135
Excellent	66.25%	318
Answered		480
Skipped		41

Question 6



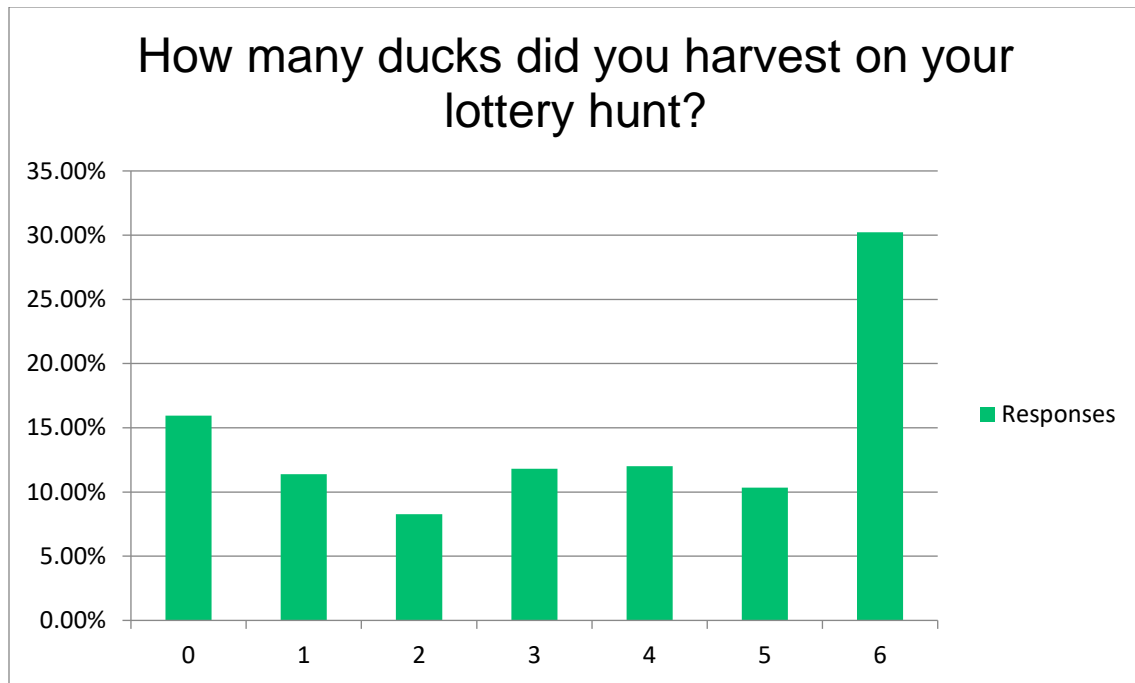
Answer Choices	Responses	
Positive	51.97%	79
Negative	3.95%	6
Neutral	9.87%	15
Other	34.21%	52
Answered		152

Question 7



Answer Choices	Responses	
Very poor	0.21%	1
Poor	0.42%	2
Fair	3.35%	16
Good	19.25%	92
Excellent	76.78%	367
Answered		478
Skipped		43

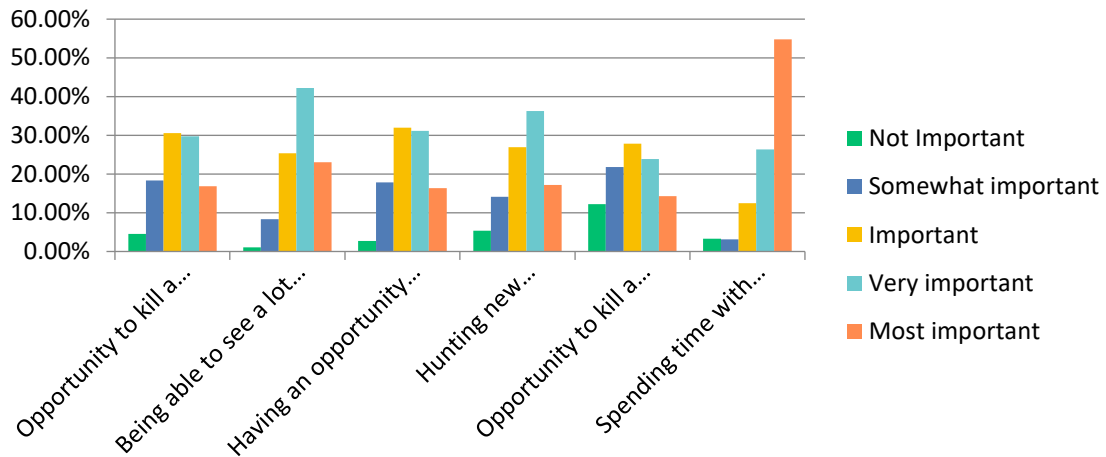
Question 8



Answer Choices	Responses	
0	15.94%	77
1	11.39%	55
2	8.28%	40
3	11.80%	57
4	12.01%	58
5	10.35%	50
6	30.23%	146
Answered		483
Skipped		38

Question 9

Please rate the importance you place on the following aspects of Category 1 Waterfowl lottery hunts:



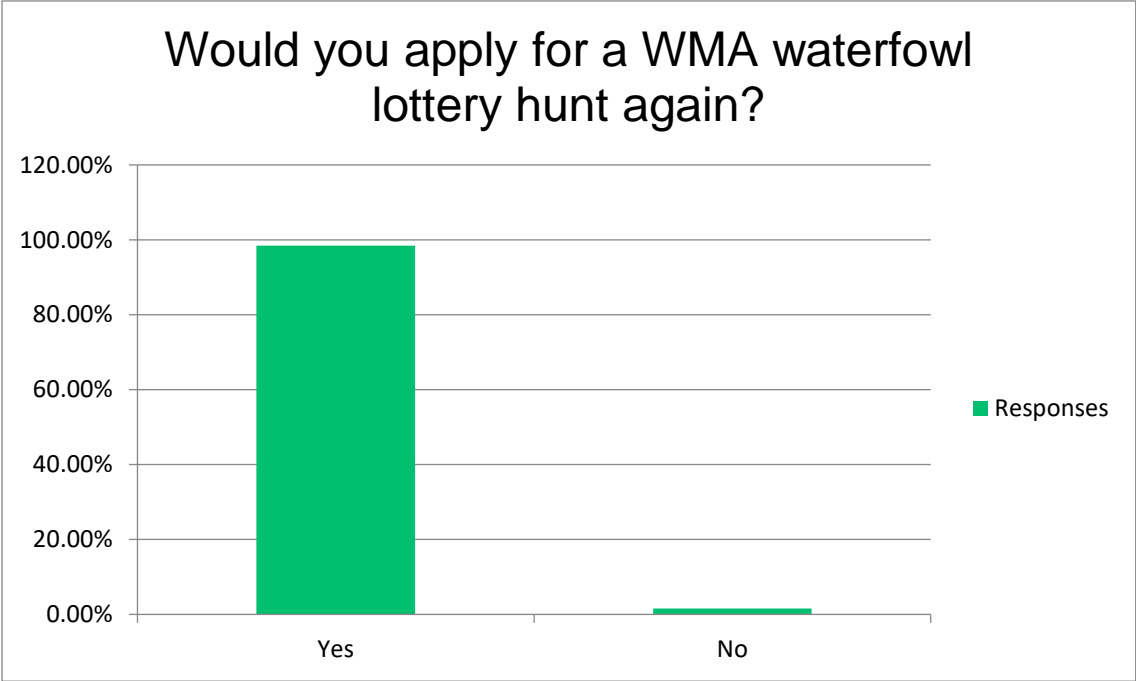
	Not Important		Somewhat important		Important		Very important		Most important		Total
Opportunity to kill a limit of ducks	4.57%	22	18.30%	88	30.56%	147	29.73%	143	16.84%	81	481
Being able to see a lot of ducks	1.04%	5	8.32%	40	25.36%	122	42.20%	203	23.08%	111	481
Having an opportunity to harvest a variety of species	2.70%	13	17.84%	86	31.95%	154	31.12%	150	16.39%	79	482
Hunting new places/see different areas or habitat	5.39%	26	14.11%	68	26.97%	130	36.31%	175	17.22%	83	482
Opportunity to kill a specific species of duck (i.e pintail, mottled duck)	12.24%	59	21.78%	105	27.80%	134	23.86%	115	14.32%	69	482
Spending time with family or friends	3.32%	16	3.11%	15	12.45%	60	26.35%	127	54.77%	264	482
										Answered	482
										Skipped	39

Question 10



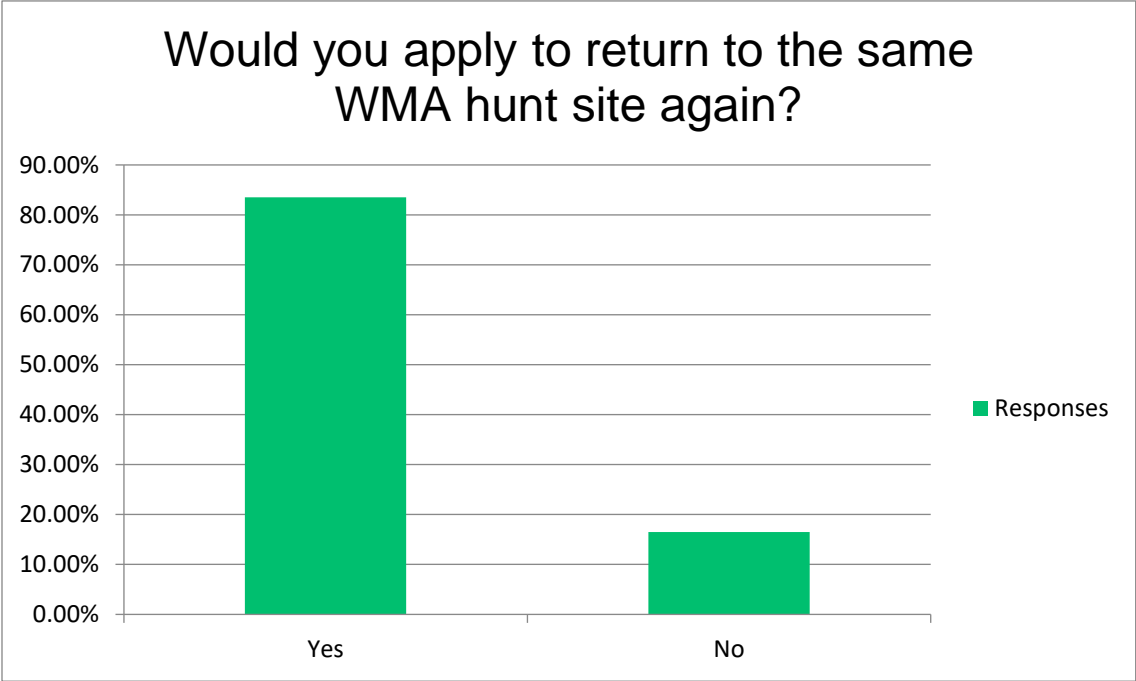
Answer Choices	Responses	
Very dissatisfied	5.19%	25
Dissatisfied	9.13%	44
Neither satisfied nor dissatisfied	7.88%	38
Satisfied	27.39%	132
Very satisfied	50.41%	243
Answered		482
Skipped		39

Question 11



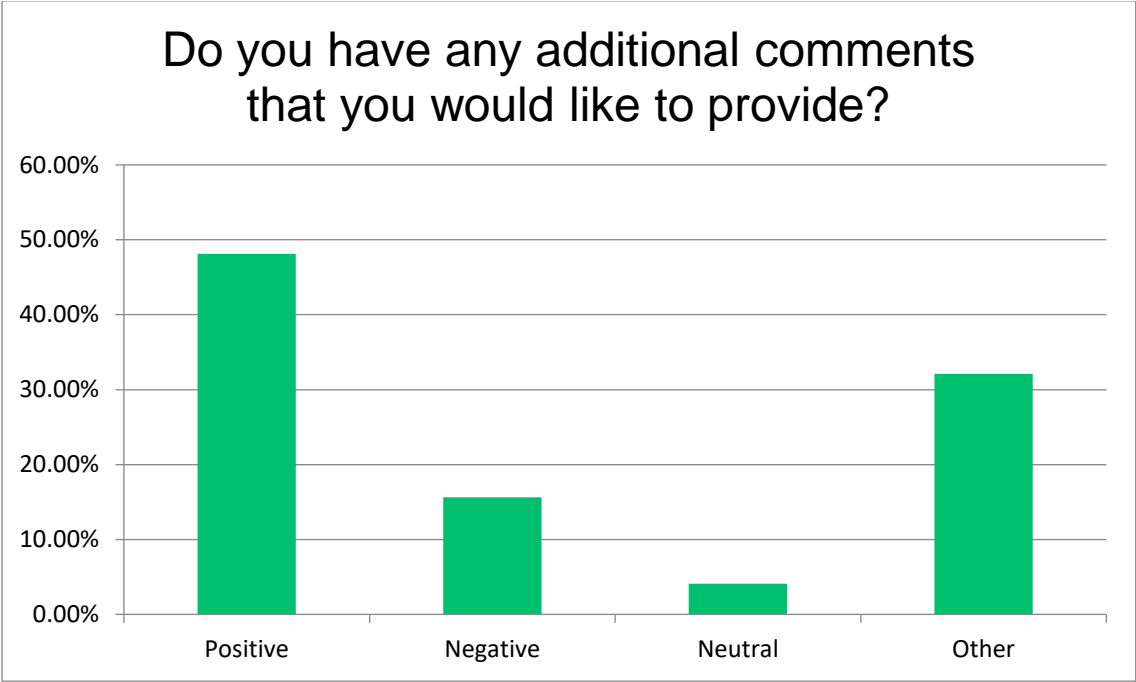
Answer Choices	Responses	
Yes	98.42%	497
No	1.58%	8
Answered		505
Skipped		16

Question 12



Answer Choices	Responses	
Yes	83.50%	420
No	16.50%	83
Answered		503
Skipped		18

Question 13



Answer Choices	Responses	
Positive	48.15%	117
Negative	15.64%	38
Neutral	4.12%	10
Other	32.10%	78
Answered		243



DISCUSSION

The SCDNR Waterfowl Lottery hunts provide important, high quality opportunities to South Carolina hunters at a variety of intensively managed properties throughout the state. The results of the 2019-2020 Category 1 Waterfowl Hunter Survey are overwhelmingly positive as evidenced by approximately 98.5% of respondents indicating that they will continue to apply for Category 1 Waterfowl Lottery Hunts in future years. This may be the most important answer provided in the survey as it illustrates that the quality and satisfaction experienced on the Category 1 Waterfowl Lottery Hunts is sufficient to ensure that participants are willing to continue applying in the future. Additionally, the results of this survey demonstrate that the SCDNR Category 1 Waterfowl Hunts are filling a critical public need for quality waterfowl hunting opportunities as more than one-quarter (28%) of all respondents indicated that this was the only waterfowl hunt they participated in in the 2019-2020 season. The Category 1 Waterfowl Hunts may represent the only opportunity that is available to a portion of the public.

Responses were received from 521 of the 904 individuals solicited to participate in the survey and respondents from all hunt sites were included. The Category 1 Waterfowl Lottery Hunt was the only waterfowl hunt that approximately 28% of the respondents participated in during the 2019-2020 season, highlighting the importance of these hunts. Approximately 41% of respondents are more avid waterfowl hunters, reporting hunting 5 or more times during the 2019-2020 season. Eighty-four percent of the respondents reported harvesting at least 1 duck during their lottery hunt; however, nearly one-third (30%) reported taking a limit of 6 birds. In fact, the category of those who report harvesting 6 ducks exceeds every other category. Approximately 16% reported harvesting no ducks on their hunt.

Ensuring that lottery applicants are effectively able to navigate the online lottery hunt portal is important to the success of the Lottery Hunt Program. As SCDNR utilizes an outside vendor to manage the online portal, programming changes to improve the user experience have been difficult to implement, but we are very interested to understand how users perceive the online application process. Sixty-six percent of respondents indicated that the lottery application and hunt site selection process was either easy or very easy to navigate with only 7.5% indicating difficult or very difficult. Additional comments (124) were submitted by respondents regarding the application process and we attempted to classify these as positive, negative, neutral, or other (unrelated to the lottery hunt application or site selection process). Thirty-eight percent provided positive comments on the process, 21% negative, 7% neutral, and 34% of responses were classified as other. Generally, negative comments were related to extended wait times experienced between being selected to hunt, often 3 to 4 years. Additionally, there were multiple suggestions that the site/date selection was tedious and could be improved, as well suggestions to add an “any site/any date” option and “any date” option for a specific property. These responses and suggestions for improvements will be valuable as SCDNR updates our online portal in order to improve user experiences and ease of navigation. In fact, SCDNR is currently in the early stages of soliciting bids from third-party licensing vendors, and these comments may be incorporated into the lottery hunt portion of the licensing bid process.

Once applicants are selected, they are provided directions to their hunt sites as well as information to help them prepare for their hunt. Upon arriving at their selected hunt site, hunters are greeted by SCDNR staff, randomly draw for their hunt locations, and are provided a pre-hunt briefing. This briefing is to orient the hunters to the site, to provide important safety guidelines and other pertinent hunt information, and to answer any questions the hunters may have prior to being delivered to their hunt

location. Questions 5,6, and 7 relate to information provided in, and the quality of, the pre-hunt briefing and the professionalism of SCDNR hunt site staff. Both the quality and content of the hunt briefing and the professionalism of SCDNR staff were rated extremely high. Ninety-four percent rated the pre-hunt briefing as good or very good, with only 1.5% reporting poor or very poor. The professionalism exhibited by SCDNR staff was exemplary and 96% rated as good or better with less than 1% reporting poor or very poor. These ratings are a testament to the professionalism of our staff and a point of pride that the Department strives to maintain.

In order to understand the motivations and priorities of the Waterfowl Lottery participants, they were asked to rate the importance of six different factors contained in question 9. These six factors were identified by staff based on hunter feedback, professional experience, and discussions on what the hunting opportunities are thought to provide. Prior to the survey and based on hunter feedback, staff hypothesized that opportunities to kill a limit of ducks, opportunity to kill a specific species of duck, opportunity to harvest a variety of duck species, and hunting new places/see different areas or habitats would rate of the highest importance to participants. Overwhelmingly (81%), participants identified that “spending time with family or friends” was of the highest importance by rating it as very important or most important to them. These opportunities do not represent the only means by which individuals can spend time together but may highlight the importance of allowing participants to select their own groups of 1-4 individuals. This ability to select their party members and party size may have the effect of enriching the entirety of the hunting experience. Of second highest importance was being able to see a lot of ducks, and 65% of respondents ranked this as very important or most important. All other factors were rated of similar importance to participants and indicates these factors are important to how our hunters derive satisfaction from their hunt.

This survey was designed to help understand the satisfaction of a typical participant. Based on hunter feedback and professional experience, staff believe that there are strong biases in who we hear from in the absence of a survey, particularly in people that report their experiences to the central office. It appears that we are most likely to hear from individuals if their experience is extremely satisfying or extremely dissatisfying and rarely hear anything in between the two extremes. This can lead to a perception that the typical hunt experience varies widely and so does satisfaction. Reassuringly, approximately 80% of hunters report being satisfied or very satisfied and only 14% report dissatisfaction. Very satisfied hunters represent more than 50% of all responses, and are the category containing the most responses. Only 5% report being very dissatisfied, the category containing the fewest responses. It is important to note that those reporting dissatisfied or very dissatisfied occur across nearly all hunt sites and may be more reflective of specific site conditions and weather on the day of their hunt. The low percentage and distribution of negative ratings across hunt sites suggests that these experiences are infrequent and not due to chronic deficiencies at specific locations.

Perhaps more informative of the overall satisfaction and importance of the Category 1 Waterfowl Lottery Hunts are questions 11 and 12, targeted at determining if hunters will continue to apply for lottery hunts and if they will reapply for the same hunt site again. More than 98% of respondents indicated that they plan to continue to apply for SCDNR Waterfowl Lottery Hunts. Eight hunters (1.5%) indicated that they would not reapply in the future. Though there was no ability to provide answers for why they would choose not to participate again, one individual stated that “The reason I not going to apply again is that duck hunting doesn't interests me because of the decline in ducks in SC. Rather be fishing” and others referenced extended wait times and lack of available food/planting. Additionally,

83.5% of respondents reported that they would reapply to the same site again indicating a high degree of satisfaction, interest, and optimism for these locations. The 16.5% that would not reapply for the same site were distributed across virtually every available hunt location and do not appear to represent chronic deficiencies of specific locations. Some of the possible reasons for not reapplying for a specific location can be attributed to the strenuous hunt conditions that are involved in the majority of the hunt locations. As indicated in the general comments, several hunters did not realize that walking in mucky muddy conditions for some distance was necessary. That more than 98% of Category 1 Waterfowl Lottery Hunt participants plan to continue their participation in the program is confirmation of the quality opportunities this program provides.

The final question of the survey was designed to allow participants to provide any additional comments. While difficult to categorize, we again classified responses as positive, negative, neutral, or other. Comments classified as other were those generally described as either observations by the respondent or suggestions to improve process, user experience, questions to SCDNR, or personal opinions on a variety of topics. An opportunity to provide non-specific feedback was believed to invite additional criticism, and we expected this question to skew toward the negative. To our surprise most comments were positive (48%), followed by those classified as “other” (32%), then by negative comments (16%), and only 4% classified as neutral.

Open comments, offered in questions 3,6, and 9, allowed participants the opportunity to provide any feedback they would like and may provide the most useful insight in identifying areas for where we excel, need improvement, or where the general public may not be fully informed. In general, criticisms were directed at wait times experienced between hunting opportunities, a perception that additional planting is needed to provide adequate food sources, disapproval of the participation of non-resident hunters, and specific suggestions to improve some aspect of their experience.

It is clear from the results of this survey that the SCDNR Waterfowl Lottery is an important and valuable hunting opportunity for participants and most are satisfied with their experience. However, there are areas for improvement and SCDNR should evaluate participant satisfaction regularly. Any changes to this program must balance the potential for improvement against potential negative impacts to hunt quality.

Since the implementation of the Category 1 Waterfowl Lottery Hunts, participants have experienced high satisfaction and have come to expect hunts of high quality. This reputation of quality opportunities has driven increased participation in the lottery, approximately 5,000 people each year, and has resulted in an extension of wait times. Commenters provided numerous expressions of concern that wait times are too long, and the easy answer is to allow more hunters to participate each year. In order to reduce average wait times by a year, there would have to be significant increases in total hunters annually selected. Such an increase may also serve to recruit additional participants, again increasing wait times, and rendering any increase in hunters selected each year null. Increased hunter numbers at any site must also be balanced to maintain the quality of the hunting opportunity provided, something staff do very well each year. Too many hunters and you potentially affect overall waterfowl hunting success, yet with too few you do not realize the full potential of the Category 1 properties. This survey already points to most of the negative responses being related to poor hunting, so staff should continue to maximize all available hunting opportunities annually while maintaining the quality of those opportunities.

There were several comments that indicated a portion of users experienced difficulty navigating the online portal. As SCDNR updates the online presence of the Lottery Hunt Program, it should use the opportunity to improve the user interface and make site/date selection more intuitive and efficient. An additional hurdle exists within the structure of the SCDNR Customer Database that allows individual users to have multiple Customer Identification Numbers (CIN) and may unintentionally increase wait times for applicants. As lottery preference points are tied to specific CINs and an individual user may have multiple CINs, we have seen customers apply using CINs that do not contain their current lottery hunt preference points. There is also a chance for preference points for one individual to be spread over multiple CINs if they have not been consistent in using the same CIN year to year. Over the last two lottery draws, SCDNR has developed programming tools to help in the identification of individuals who may have multiple CINs and the remedy of preference point disparities that the customer may be unaware of. It is critical that each customer apply with the same CIN every year. When the customer fails to utilize the same CIN or creates new CINs, they put themselves at a disadvantage for being selected. In the past, this often only came to our attention when a customer experienced excessive wait time and decided to contact the Department. Until the creation of multiple CINs for individual users is stopped, we will continue to see issues associated with preference points. Staff works hard to consolidate or move preference points to participants with multiple CINs before the drawing; however, there is still a chance that a participant, and therefore the entire hunt party, loses out on being selected due to the customer creating a new CID.

The Category 1 Waterfowl Lottery Hunts are providing high quality opportunities for participants each year. The fact that the most often heard criticism is that wait times are too long indicates the value that these hunts provide. While a number of factors influencing hunt success and satisfaction are beyond the control of SCDNR (rainfall and flooding, weather conditions, migration, poor shooting, etc...) these hunts are successful in meeting the goal of providing quality hunting opportunities to the general public on public lands that are intensively managed for wildlife.

Acknowledgements: *Our thanks to Jay Butfiloski for development of the survey instrument, its distribution, and the compilation of responses and Joachim Treptow for providing the photos used in this report. Additionally, we'd like to thank SCDNR staff for their dedication to ensuring that each Waterfowl Lottery participant is treated to a unique high-quality hunting experience on professionally managed properties. The professionalism and dedication of SCDNR staff is evident in their work and is noticed by an appreciative public. Thank you for the countless hours spent caring for and preparing these important sites each year, the early mornings spent shepherding hunters to and from their sites, the care shown in receiving applications and ensuring preference points are accounted for, and ensuring the draw is conducted fairly. The Waterfowl Lottery Hunts would not be successful without your hard work.*





